

**Flood Control Project Maintenance
Levee Inspections**
LMA District Cover Sheet
Spring 2017 Levee Inspection Results

Reclamation District No. 2096 Wetherbee Lake

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
† Overall LMA Rating (Fall Only)				

** Non-receipt of Summer or Winter Inspection
Reports may effect overall annual rating.

† **SPRING INSPECTIONS:** Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Spring 2017 Levee Inspection Results

Reclamation District No. 2096 Wetherbee Lake

Waterway			Bank	Unit Miles
Unit No. 01 San Joaquin River			Right	0.16
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	4/11/2017 - 4/11/2017			
DWR Inspector	Maksim Khashchuk			
Accompanied By	Randy Barker RD 2096			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2096 Wetherbee Lake

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	0.16	04/11/2017 04/11/2017	Maksim Khashchuk

LM Start		Rating **	A	Issue No.	1
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Operations & Maintenance Manuals				
DWR ID	DWR_RD2096_01_s_2013_1				
Comment Code					
Inspector Comment					
O&M Manual is at the LMA's office.					

No Photos

LM Start		Rating **	A	Issue No.	2
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Emergency Supplies & Equipment				
DWR ID	DWR_RD2096_01_s_2013_2				
Comment Code					
Inspector Comment					
Emergency supplies available.					

No Photos

LM Start		Rating **	A	Issue No.	4
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Flood Preparedness & Training				
DWR ID	DWR_RD2096_01_s_2013_4				
Comment Code					
Inspector Comment					
LMA has a flood response plan in the office. It is recommended that the LMA and interested local volunteers take a flood fight training class in order to refresh their flood fight skills and methods.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2096 Wetherbee Lake

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	0.16	04/11/2017 04/11/2017	Maksim Khashchuk

LM Start	0.02	Rating **	A/W	Issue No.	15
LM End	0.02	Issue Type +	Ma	Location *	N/A
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.773852 °	37.773852 °
				-121.298413 °	-121.298413 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:21505 DS_ID:22737 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: - steel walkway to pump platform.- pumping plant and navigation structure area is fenced with gates at north and south end. FIELD_STRUCT_DESC: 1 of 3. Three 36-inch pipes through levee, 3.5 feet below the crown. Automatic pumping plant and concrete sump on the landward side. Vent pipes on the waterward shoulder. Concrete headwall and spillbox on the waterward side. Flap gate on the waterward end. O&M Manual, December 1968. FS Date: 9/10/2013					

LM Start	0.02	Rating **	A/W	Issue No.	15 (cont)
LM End	0.02	Issue Type +	Ma	Location *	N/A

Photo 1 of 3 : UCIP_SP_2017_21505_36449.jpg



WS view: three wooden flap gates for drainage pipes. Concrete headwall at levee slope end.

Photo 2 of 3 : UCIP_SP_2017_21505_36448.jpg




WS view: three air vents for three drainage pipes on levee shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	--	---

Levee Inspection Report By Mile - Spring 2017

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	0.16	04/11/2017 04/11/2017	Maksim Khashchuk

Photo 3 of 3 : UCIP_SP_2017_21505_36447.jpg



LS view: automatic pumping plant with three pumps. Steel walkway to pump platform.

Photo 1 of 3 : UCIP_SP_2017_21507_36456.jpg

WS view: three wooden flap gates for drainage pipes. Concrete headwall at levee slope end.

Thursday, June 01, 2017 10:33 **FINAL DATA** Page 3 of 10

Levee Inspection Report By Mile - Spring 2017

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	0.16	04/11/2017 04/11/2017	Maksim Khashchuk

LM Start	0.02	Rating **	A/W	Issue No.	16 (cont)
LM End	0.02	Issue Type +	Ma	Location *	N/A

WS view: three air vents for three drainage pipes on levee shoulder.

LS view: automatic pumping plant with three pumps. Steel walkway to pump platform.

* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2096 Wetherbee Lake

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	0.16	04/11/2017 04/11/2017	Maksim Khashchuk

LM Start	0.03	Rating **	A/W	Issue No.	17
LM End	0.03	Issue Type +	Ma	Location *	N/A
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.773818 °	37.773818 °
				-121.298423 °	-121.298423 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:21508 DS_ID:22739 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: - steel walkway to pump platform.- pumping plant and navigation structure area is fenced with gates at north and south end. FIELD_STRUCT_DESC: 2 of 3. Three 36-inch pipes through levee, 3.5 feet below the crown, one concrete cutoff wall. Automatic pumping plant and concrete sump on the landward side. Vent pipes on the waterward shoulder. Concrete headwall and spillbox on the waterward side. Flap gate on the waterward end. O&M Manual, December 1968. FS Date: 9/10/2013					

LM Start	0.03	Rating **	A/W	Issue No.	17 (cont)
LM End	0.03	Issue Type +	Ma	Location *	N/A

Photo 1 of 3 : UCIP_SP_2017_21508_36463.jpg



WS view: three wooden flap gates for drainage pipes. Concrete headwall at levee slope end.

Photo 2 of 3 : UCIP_SP_2017_21508_36460.jpg



WS view: three air vents for three drainage pipes on levee shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	--	---

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2096 Wetherbee Lake

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	0.16	04/11/2017 04/11/2017	Maksim Khashchuk

LM Start	0.03	Rating **	A/W	Issue No.	17 (cont)
LM End	0.03	Issue Type +	Ma	Location *	N/A
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.773818 °	37.773818 °
				-121.298423 °	-121.298423 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:21508					
DS_ID:22739					
EP_NO: N/A					
Repair Type: No Action Needed					
Crossing Status: Found					
UCIP Comments: - steel walkway to pump platform.- pumping plant and navigation structure area is fenced with gates at north and south end.					
FIELD_STRUCT_DESC: 2 of 3. Three 36-inch pipes through levee, 3.5 feet below the crown, one concrete cutoff wall. Automatic pumping plant and concrete sump on the landward side. Vent pipes on the waterward shoulder. Concrete headwall and spillbox on the waterward side. Flap gate on the waterward end. O&M Manual, December 1968.					
FS Date: 9/10/2013					

Photo 3 of 3 : UCIP_SP_2017_21508_36461.jpg



LS view: automatic pumping plant with three pumps. Steel walkway to pump platform.

LM Start	0.03	Rating **	M	Issue No.	18
LM End	0.03	Issue Type +	En	Location *	N/A
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.773800 °	37.773800 °
				-121.298428 °	-121.298428 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:21506					
DS_ID:24666					
EP_NO: N/A					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: - more information needs to be find from LMA/DWR					
Inspector for this crossing. - needs to find whether this pipe passes					
through the levee.					
FIELD_STRUCT_DESC: A 4-inch steel pipe through the levee and to					
pump platform, 3 ft. below the crown. It is a element of pumping plant.					
Field study discovered utility crossing.					
FS Date: 9/10/2013					

Photo 1 of 2 : UCIP_SP_2017_21506_36453.jpg



LS view: 4-inch steel pipe (right) through the levee and to pump platform.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
--	--	--	--	---	--	---	--

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2096 Wetherbee Lake

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	0.16	04/11/2017 04/11/2017	Maksim Khashchuk

LM Start	0.03	Rating **	M	Issue No.	18 (cont)	
LM End	0.03	Issue Type +	En	Location *	N/A	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.773800 °	37.773800 °	
				-121.298428 °	-121.298428 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:21506						
DS_ID:24666						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: - more information needs to be find from LMA/DWR						
Inspector for this crossing. - needs to find whether this pipe passes						
through the levee.						
FIELD_STRUCT_DESC: A 4-inch steel pipe through the levee and to						
pump platform, 3 ft. below the crown. It is a element of pumping plant.						
Field study discovered utility crossing.						
FS Date: 9/10/2013						

Photo 2 of 2 : UCIP_SP_2017_21506_36452.jpg



LS view: closer view of 4-inch steel pipe (left) through the levee and to pump platform.

LM Start	0.05	Rating **	A/W	Issue No.	8
LM End	0.05	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.773479 °	37.773479 °
				-121.298486 °	-121.298486 °
DWR ID	DWR_RD2096_01_f_2013_8				
Comment Code					
PO : Pole					
Inspector Comment					
Two telephone poles at landside levee toe.					

Photo 1 of 1 : SP_2017_RD2096_117_8_20170407_00003.jpg



View of the telephone poles at the landside levee toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2096 Wetherbee Lake

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	0.16	04/11/2017 04/11/2017	Maksim Khashchuk

LM Start	0.06	Rating **	N	Issue No.	9
LM End	0.06	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.773348 °	37.773348 °
				-121.298475 °	-121.298475 °
DWR ID	DWR_RD2096_01_s_2014_9				
Comment Code					
T5 : Tree stumps.					
Inspector Comment					
Pine tree stump at levee toe.					

Photo 1 of 1 : SP_2017_RD2096_117_9_20170407_00004.jpg



View of the tree stump at the landside levee toe.

LM Start	0.08	Rating **	M	Issue No.	13
LM End	0.08	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.773021 °	37.773021 °
				-121.298430 °	-121.298430 °
DWR ID	DWR_RD2096_01_s_2014_13				
Comment Code					
RW : Retaining Wall					
Inspector Comment					
Abut 1 foot by 50 feet retaining wall at levee toe with irrigation and landscaping.					

Photo 1 of 1 : SP_2017_RD2096_117_13_20170407_00008.jpg



View of the retaining wall at the landside levee toe.

LM Start	0.09	Rating **	A	Issue No.	14
LM End	0.09	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.772896 °	37.772896 °
				-121.298474 °	-121.298474 °
DWR ID	DWR_RD2096_01_s_2017_14				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					
Acceptable vegetation control on the levee slope.					

Photo 1 of 1 : SP_2017_RD2096_117_14_20170417_00020.jpg



View of the acceptable vegetation on the levee slope.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2096 Wetherbee Lake

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	0.16	04/11/2017 04/11/2017	Maksim Khashchuk

LM Start	0.09	Rating **	A/W	Issue No.	6
LM End	0.09	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.772891 °	37.772891 °
				-121.298454 °	-121.298454 °
DWR ID	DWR_RD2096_01_s_2016_6				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
LMA has effective rodent control program. Monitor this location for possible future activity.					

Photo 1 of 1 : SP_2017_RD2096_117_6_20170407_00002.jpg



View of the rodent hole on the landside levee slope.

LM Start	0.12	Rating **	M	Issue No.	11
LM End	0.12	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.772434 °	37.772434 °
				-121.298433 °	-121.298433 °
DWR ID	DWR_RD2096_01_s_2015_11				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Regrade and re-compact damaged waterside levee slope.					

Photo 1 of 3 : SP_2017_RD2096_117_11_20170407_00005.jpg



View of the waterside slope damaged by vehicle.

LM Start	0.12	Rating **	M	Issue No.	11 (cont)
LM End	0.12	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : SP_2017_RD2096_117_11_20170407_00006.jpg



View of the vehicle tracks eroding the waterside levee slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
--	--	---	--	---	--

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2096 Wetherbee Lake

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	0.16	04/11/2017 04/11/2017	Maksim Khashchuk

LM Start	0.12	Rating **	M	Issue No.	11 (cont)	
LM End	0.12	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Slope Stability			37.772434 °		37.772434 °
				-121.298433 °		-121.298433 °
DWR ID	DWR_RD2096_01_s_2015_11					
Comment Code						
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.						
Inspector Comment						
Regrade and re-compact damaged waterside levee slope.						

Photo 3 of 3 : SP_2017_RD2096_117_11_20170407_00007.jpg



Another view of the vehicle tracks on the waterside levee slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	--	---